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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|-------------------------|-----------------------------|------------------|
| 10/684,705 | 10/15/2003 | Takeshi Ohkubo | Q77937 | 3649 |
| 23373 7590 01/18/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | EXAMINER SUNG, CHRISTINE | |
| | | | ART UNIT 2884 | PAPER NUMBER |
| SHORTENED STATUTORY PERIOD OF RESPONSE 3 MONTHS | | MAIL DATE 01/18/2007 | DELIVERY MODE PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/684,705

Applicant(s)

OHKUBO, TAKESHI

Examiner

Christine Sung

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. The Amendment filed on October 19, 2006 has been accepted and entered.

Claim Objections

2. Claims 15-16 are objected to because of the following informalities: Claim 15 recites the limitation "the control means" in lines 4-5 of the claim. There is insufficient antecedent basis for this limitation in the claim. The balance of claims are objected to for being dependent on an already objected claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-13, 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Ivan (US Patent 5,877,501 A).

Regarding claims 1, 15 and 17, Ivan discloses a radiation detecting cassette (Figure 2) comprising:

a solid state radiation detector (element 10) for detecting radiation bearing image information and outputting an image signal representing a radiation image (element 26, 30 and 32);

a control means for controlling the operations of the solid state radiation detector (element 38);

a cassette main body having a case for housing the solid state radiation detector and the control means (element 1);

and a portable operating portion (element 50) for outputting command signals to the control means for operating the solid state radiation detector, formed as a separate unit from the cassette main body.

Regarding claim 2, Ivan discloses the operating portion (element 50) further comprises a display portion (display screen of a PC) for displaying the contents of the command signals.

Regarding claim 3, Ivan discloses that the operating portion (element 50) further comprises an information receiving means (element 33 to element 50) for receiving information output from the cassette main body;

and the display portion displays the information received by the information receiving means (display screen of a PC).

Regarding claim 4, Ivan discloses that the information receiving means receives information representing an operating state (i.e. status display, element 40) of the solid state radiation detector;

and the display portion displays the operating state of the solid state radiation detector (element 50).

Regarding claim 5-6 and 15, Ivan discloses that the information receiving means (element 33) receives the image signal output from the solid state radiation detector (element 26, 30 and 32);

and the display portion displays an image based on the image signal (element 50, display screen of a PC).

Regarding claims 7-12, Ivan discloses the operating portion is removably attachable to the case (see where elements 42 and 48 meet and where elements 34 and 46 meet).

Regarding claim 13, Ivan discloses information relating to reading the solid state radiation detector to record a radiation image (status display, element 40). And further discloses information relating to reading the solid state detector to read out a radiation image therefrom (column 4 lines 16-19).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2884

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ivan (US Patent 5,877,501 A).

Regarding claim 14, Ivan does not explicitly state the claimed command signals, however such information is conventional information generated by radiation images.

Image grade, image frequency, image density, image contrast, image noise, grid pattern, energy subtraction and time lapse from drug administration are all known factors that affect image quality, thus it would be obvious to one having ordinary skill in the art at the time the invention was made to account for all of these factors in order to reduce errors attributed to these factors, thus increasing the quality and accuracy of the image detected.

Response to Arguments

8. Applicant's arguments filed 10/19/2006 have been fully considered but they are not persuasive.

9. Applicant argues that the Ivan reference does not disclose an operating portion for outputting command signal to the control means for operating the detector. However, the examiner respectfully disagrees. Ivan discloses that the base station (element 44) and the computer (element 50) download the detected image signals from the cassette (element 1). Both the base station and computer output commands to "operate" the radiation detector. When downloading signals from a cassette, there is communication between the cassette and the computer/base station. Downloading signals is not a one way street, the computer/base station must communicate with the cassette circuitry to initiate the transfer of data. Nothing in the claims limits the type of command signals to operate the radiation detector, thus it is reasonable

Art Unit: 2884

to interpret such command signals as initiating downloading of images from the cassette to the computer/base station.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Sung whose telephone number is 571-272-2448. The examiner can normally be reached on Monday- Friday 9-5 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2884

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christine Sung
Examiner
Art Unit 2884

CS



DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800